orthogonal cover is zero, the pilot reference can be obtained by accumulating the despread samples over the width of each pilot burst. Pilot processing in a CDMA-based system is described in further detail in U.S. Pat. No. 5,764,687, entitled "MOBILE DEMODULATOR ARCHITECTURE FOR A SPREAD SPECTRUM MULTIPLE ACCESS COMMUNICATION SYSTEM," assigned to the assignee of the invention and incorporated herein by reference.

Processor core **540** performs the call processing, modem initialization, and monitoring functions, and further performs the data processing and handling functions for access terminal **106***x*. Interface unit **550** provides interconnection between access terminal **106***x* and peripheral devices (e.g., a computer). Status indicators **560** provide indications of the operating state and conditions of access terminal **106***x*.

The elements of access terminal **106***x* are described in further detail in the aforementioned U.S. patent application Ser. No. 09/575,073.

The elements of the access points and access terminals can be implemented in various manners. For example, these elements can be implemented using one or more application specific integrated circuits (ASICs), digital signal processors (DSPs), micro-controllers, microprocessors, other electronic circuits designed to perform the functions described herein, or a combination thereof. Also, some of the functions described herein can be implemented with a general-purpose processor or a specially designed processor operated to execute instruction codes that achieve the functions described herein. Thus, the elements of the access points and access terminals described herein can be implemented using hardware, software, or a combination thereof.

The foregoing description of the preferred embodiments is provided to enable any person skilled in the art to make or use the present invention. Various modifications to these embodiments will be readily apparent to those skilled in the art, and the generic principles defined herein may be applied to other embodiments without the use of the inventive faculty. Thus, the present invention is not intended to be limited to the embodiments shown herein but is to be accorded the widest scope consistent with the principles and novel features disclosed herein.

What is claimed is:

1. An access terminal for use in a wireless communication system, comprising:

an RF module configured to receive a modulated signal over a wireless communication link and to condition the received signal to generate a conditioned signal;

a modem block coupled to the RF module and configured to process the conditioned signal to recover a plurality of pilot references transmitted from a plurality of access points, wherein the pilot reference from each access point is transmitted in pilot bursts that are synchronized with a common system time reference used by each of the plurality of access points and transmitted at a same predetermined time interval during which all of the access points transmit a pilot burst such that at least respective portions of the pilot bursts overlap in time; and

a processor configured to determine link conditions based on the pilot references, to determine an access point having a highest signal quality based on the link conditions, and to determine a highest supported data rate for the access point having the highest signal quality.

2. The access terminal according to claim **1**, wherein the modem block is configured to generate samples from the conditioned signal and to despread the samples with a pseudo-noise (PN) sequence at a particular offset for each of the plurality of access points.

3. The access terminal according to claim **1**, wherein the pilot reference from each said access point is received at a maximum transmit power level.

4. The access terminal according to claim **1**, wherein the modem block is further configured to:

correlate received samples with the pilot data pattern for the pilot reference being recovered.

5. The access terminal according to claim **4**, wherein the modem block is further configured to:

despread the samples with a same PN sequence at a same time offset.

6. The access terminal according to claim **5**, wherein the modem block is further configured to:

decover the samples with a same orthogonal code used for the pilot reference at the selected access point.

7. The method of claim **1**, further comprising:

estimating a signal strength for a first pilot reference based on at least one pilot burst associated with the first pilot reference; and

estimating a maximum interference power for the first pilot reference caused by a second pilot reference.

8. The method of claim **7**, further comprising:

estimating a worst case carrier-to-interference (C/I) ratio for the first pilot reference.

9. An access terminal, comprising:

means for receiving a plurality of pilot references transmitted from a plurality of access points, the pilot references from each access point being transmitted in pilot bursts that are synchronized with a common time reference used by each of the plurality of access points and transmitted at a same predetermined time interval during which all of the access points transmit a pilot burst such that at least respective portions of the pilot bursts overlap in time;

means for determining link conditions based on the pilot references;

means for determining an access point having a highest signal quality based on the link conditions; and

means for determining a highest supported data rate for the access point having the highest signal quality.

10. The access terminal according to claim **9**, further comprising:

means for determining an access point having a best signal quality based at least on the received pilot references.

11. The access terminal according to claim **9**, further comprising:

means for correlating received samples with a pilot data pattern for the pilot references being recovered.

12. The access terminal according to claim **10**, further comprising:

means for determining a highest data rate supported by the access point.

13. The access terminal according to claim **11**, further comprising:

means for despreading the samples with a same PN sequence at a same time offset.

14. The access terminal according to claim **13**, further comprising:

means for decovering the samples with an orthogonal code used for one of the pilot references at a selected access point.

15. The access terminal according to claim **14**, wherein the pilot bursts are aligned in time at the time of transmission.